

REMARKS

The Examiner has rejected claims 1 – 2 and 4 – 7 under 35 USC 102)b) as being anticipated by Everingham et al. (US 6 453 667).

Everingham (US 6 453 667) discloses an air control valve and a method for exhaust gas treatment including a mechanism which is controlled by a solenoid and by the difference between the fluid pressures at its inlet and its outlet. The exhaust gas flow path is provided by an inlet 34, the solenoid-controlled valve structure 70, the aperture 56 of the reed valve 50 and the outlet 36. No means are provided for redirecting and cooling the exhaust gas flowing through the valve. The valve has no other purpose than controlling the flow of the exhaust gas re-circulated from an engine exhaust duct to the engine intake duct for admixture to the intake air.

In contrast, it is the object of the present invention to provide a multipurpose valve which can accommodate higher exhaust gas pressures and temperatures which permits its use also for temperature-sensitive applications.

In accordance with the invention, such a valve includes baffling devices (14, 26, 27), which are arranged in a valve housing structure downstream of the non-return valve structure 20 of the valve 10 so as to deflect the exhaust gas flow from the outlet (19) through at least 90°, the baffling structure further including a baffle plate 24 which is arranged transversely to the valve orifice 23 and which separates a pre-chamber 35 from a deflection chamber 26 to which the outlet 19 is connected. As a result, the hot gas flow is deflected through the baffling structure via a passage orifice 30 in the baffle plate 24, which orifice 30 is radially offset in relation to the valve orifice 23.

Consequently, a tortuous flow path is provided in the outlet area of the valve housing so that a turbulent flow is obtained in the valve outlet area in which the gas flow is in close heat transfer contact with the valve outlet housing structure so as to transmit heat to the housing structure which is preferably provided with cooling ribs to remove heat from the lower housing part.

The reference does not disclose a valve housing outlet structure with a tortuous flow passage ensuring intense contact of the exhaust gas with the valve housing walls, as defined in amended claim 1 by the inclusion of the subject matter of claim 2 in claim 1.

Reconsideration of claim 1 as being anticipated by the cited reference is therefore respectfully requested.

Furthermore, such a structure incorporated into a valve housing is also not suggested by the cited reference nor can any hint in this regard be derived from the cited reference so that the arrangement as defined in amended claim 1 cannot possibly be derived from the cited reference.

Consequently, the arrangement as defined in claim 1 is not only novel but also unobvious so that claim 1 should be clearly patentable.

Claim 2 has been deleted.

The subject matter of claim 3 was already be considered by the Examiner to be patentable.

The remaining claims 4 to 7 define features which are considered to be advantageous in connection with the valve as defined in claim 1. These claims are all dependent directly or indirectly on claim 1 so that they include all the features of claim 1 and should therefore be patentable together with claim 1. Reconsideration of claims 4 to 7 is respectfully requested and allowance of claims 1 and 4 to 7 is solicited.

Respectfully submitted,



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